

## CLAIMS

What is claimed is:

1. A method of encoding and distributing a schema for content description comprising:  
creating a signifier to signal that the schema is to be sent in a particular format;  
and  
encoding a predetermined amount of the schema according to the particular format.
2. The method of claim 1 further comprising transmitting the signifier.
3. The method of claim 2 further comprising transmitting the predetermined amount of the encoded schema in the particular format.
4. The method of claim 1 wherein encoding the predetermined amount of the schema comprises binary encoding the schema.
5. The method of claim 1 wherein binary encoding the schema comprises:  
assigning a first token code for each component in the schema, the first token code associated with a corresponding component value in a lookup table; and  
assigning a second token code for each attribute of the component, the second token code associated with a corresponding attribute value in the lookup table.
6. The method of claim 1 wherein the signifier is a header.
7. The method of claim 6 wherein the header comprises an eight-bit mask.
8. The method of claim 7 wherein the eight-bit mask includes eight positions that define the particular format of the predetermined amount of schema being sent.

9. The method of claim 8 wherein a first position in the eight bit mask indicates that the schema is to be sent as a whole entity.

10. The method of claim 8 wherein a second position in the eight bit mask indicates that some components are to be sent first followed by the schema.

11. The method of claim 8 wherein a third position in the eight bit mask indicates that the schema is to be sent first, followed by a set of components.

12. The method of claim 8 wherein a fourth position in the eight-bit mask indicates component addition.

13. The method of claim 8 wherein a fifth position in the eight-bit mask indicates component updating.

14. The method of claim 8 wherein a sixth position in the eight-bit mask indicates component deletion.

15. The method of claim 8 wherein an eighth position in the eight-bit mask indicates that another header is to be sent.

16. The method of claim 5 wherein the first token code comprises a six bit field.

17. The method of claim 5 wherein a bit-field length of the second token code depends on a maximum number of attributes of the corresponding component.

18. The method of claim 5 wherein a second token code indicates an extension of the corresponding attribute.

19. The method of claim 5 wherein a second token code indicates an attribute end.

20. The method of claim 5 wherein a first token code indicates a component end.

21. The method of claim 5 wherein a first token code indicates a schema end code.

22. A machine-readable medium having executable instructions to cause a computer to perform a method comprising:  
creating a signifier to signal that the schema is to be sent in a particular format;  
and  
encoding a predetermined amount of the schema according to the particular format.

23. The machine-readable medium of claim 22 wherein encoding the predetermined amount of schema comprises binary encoding the schema.

24. The machine-readable medium of claim 23 wherein binary encoding the schema comprises:

assigning a first token code for each component in the schema, the first token code associated with a corresponding component value in a lookup table; and

assigning a second token code for each attribute of the component, the second token code associated with a corresponding attribute value in the lookup table.

25. A method of receiving and decoding an encoded schema for content description comprising:

receiving a signifier to signal that the schema is to be received in a particular format following the signifier; and

receiving the predetermined amount of the encoded schema in the particular format.

26. The method of claim 25 further comprising:  
looking up a value for a first token code and a second token code in the encoded schema, wherein the values are found in a lookup table; and  
decoding the encoded schema based on the lookup table values.

27. The method of claim 26 wherein the first token code corresponds to a component in the schema.

28. The method of claim 27 wherein the second token codes corresponds to an attribute of the component in the schema.

29. The method of claim 25 wherein the signifier is a header.

30. The method of claim 29 wherein the header comprises an eight-bit mask.

31. The method of claim 30 wherein the eight-bit mask includes eight positions that define what format of the predetermined amount of schema is to be received.

32. The method of claim 31 wherein a first position in the eight bit mask indicates that the encoded schema is to be received as a whole entity.

33. The method of claim 31 wherein a second position in the eight bit mask indicates that some components are to be received first followed by the encoded schema.

34. The method of claim 31 wherein a third position in the eight bit mask indicates that the schema is to be received first, followed by a set of components.

35. The method of claim 31 wherein a fourth position in the eight-bit mask indicates component addition information is to be received.

36. The method of claim 31 wherein a fifth position in the eight-bit mask indicates component update information is to be received.

37. The method of claim 31 wherein a sixth position in the eight-bit mask indicates component deletion information is to be received.

38. The method of claim 31 wherein an eighth position in the eight-bit mask indicates that another header is to be received.

39. The method of claim 26 wherein the first token code comprises a six bit field.

40. The method of claim 26 wherein a bit-field length of the second token code depends on a maximum number of attributes of the corresponding component.

41. The method of claim 26 wherein a second token code indicates an extension of the corresponding attribute.

42. The method of claim 41 wherein a second token code indicates an attribute end.

43. The method of claim 26 wherein a first token code indicates a component end.

44. The method of claim 26 wherein a first token code indicates a schema end code.

45. A machine-readable medium having executable instructions to cause a computer to perform a method comprising:

receiving a signifier to signal that the schema is to be received in a particular format following the signifier; and

receiving the predetermined amount of the encoded schema in the particular format.

46. The machine-readable medium of claim 45 further comprising:

looking up a value for a first token code and a second token code in the encoded schema, wherein the values are found in a lookup table; and

decoding the encoded schema based on the lookup up values.

47. The machine-readable medium of claim 45 wherein the signifier is a header.

48. A computer system comprising:

a processing unit;

a memory coupled to the processing unit through a system bus;

a computer-readable medium coupled to the processing unit through the system bus; and

an encoding and distribution of schema for content description program executed from the computer-readable medium by the processing unit, wherein the encoding and distribution program causes the processing unit to create a signifier to signal that the schema is to be sent in a particular format and to encode a predetermined amount of the schema according to the particular format.

49. The computer system of claim 48 further comprising a transmitter to transmit the signifier followed by the predetermined amount of the schema in the particular format.

50. The computer system of claim 48 wherein the encoding of the predetermined amount of the schema comprises binary encoding the schema.

51. The computer system of claim 50 wherein binary encoding the schema comprises:

assigning a first token code for each component in the schema, the first token code associated with a corresponding component value in a lookup table; and

assigning a second token code for each attribute of the component, the second token code associated with a corresponding attribute value in the lookup table.

52. The computer system of claim 48 wherein the signifier is a header.

53. The computer system of claim 52 wherein the header comprises an eight-bit mask.

54. The computer system of claim 53 wherein the eight-bit mask includes eight positions that define the particular format of the predetermined amount of schema being sent.

55. The computer system of claim 53 wherein a first position in the eight bit mask indicates that the schema is to be sent as a whole entity.

56. The computer system of claim 53 wherein a second position in the eight bit mask indicates that some components are to be sent first followed by the schema.

57. The computer system of claim 53 wherein a third position in the eight bit mask indicates that the schema is to be sent first, followed by a set of components.

58. The computer system of claim 53 wherein a fourth position in the eight-bit mask indicates component addition.

59. The computer system of claim 53 wherein a fifth position in the eight-bit mask indicates component updating.

60. The computer system of claim 53 wherein a sixth position in the eight-bit mask indicates component deletion.

61. The computer system of claim 53 wherein an eighth position in the eight-bit mask indicates that another header is to be sent.

62. The computer system of claim 51 wherein the first token code comprises a six bit field.

63. The computer system of claim 51 wherein a bit-field length of the second token code depends on a maximum number of attributes of the corresponding component.

64. The computer system of claim 51 wherein a second token code indicates an extension of the corresponding attribute.

65. The computer system of claim 51 wherein a second token code indicates an attribute end.

66. A computer system comprising:  
a processing unit;  
a memory coupled to the processing unit through a system bus;  
a computer-readable medium coupled to the processing unit through the system bus; and

a receiving and decoding of schema for content description program executed from the computer-readable medium by the processing unit, wherein the encoding and distribution program causes the processing unit to receive a signifier to signal that the schema is to be received in a particular format following the signifier and to receive the predetermined amount of the encoded schema in the particular format.



67. The computer system of claim 66 wherein the receiving and decoding of schema for content description system further causes the processing unit to look up a value for a first token code and a second token code in the encoded schema, wherein the values are found in a lookup table and to decode the encoded schema based on the lookup up values.

68. The computer system of claim 67 wherein the first token code corresponds to a component in the schema.

69. The computer system of claim 68 wherein the second token code corresponds to an attribute of the component.

70. The computer system of claim 66 wherein the signifier is a header.

71. The computer system of claim 70 wherein the header comprises an eight-bit mask.

72. The computer system of claim 71 wherein the eight-bit mask includes eight positions that define what format of the predetermined amount of schema is to be received.